Work Order ID 113007

February-11-14 3:16:31 PM

113007

Item ID: D4003-049 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Tank Vent Line Assembly

Start Date: 2/10/14 **Start Qty:** 2.00 *2*

Required Date: 2/10/14 **Req'd Qty:** 2.00 *2*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** MLS **Date:** 14-02-12 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr / **Revision Nbr**									
D4003 / A									
110		0.00							FF 14-03-10
110						2			
Small Fab	**Memo**	0.00							
Small Fab	1- Form tube as per dwg D4003 2- Insert sleeve before flaring								
120	QC5- Inspect part completeness to step on W/O	0.00							DAS 27 9/89
120						2			
QC	**Memo**	0.00							14/3/11
Quality Control									
130	Chemical Conversion Coat per QSI005 4.1	0.00							
130						2			AB 14-3-11
HandFinish	**Memo**	0.00							
Hand Finishing									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other _____

Item ID: D4003-049 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Tank Vent Line Assembly

Start Date: 2/10/14 **Start Qty:** 2.00 *2*
Required Date: 2/10/14 **Req'd Qty:** 2.00 *2*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC7-Inspect Chemical Conversion Coat	0.00				2x			14/03/4 DAS 36 9-89
140									
QC	**Memo**	0.00							
Quality Control									
150		0.00							
150						2			14-03-11
Small Fab	**Memo**	0.00							
Small Fab	Install nut as per dwg								
160	QC5- Inspect part completeness to step on W/O	0.00 DAS 27 9-89				2			
160									
QC	**Memo**	0.00 4/3/11							
Quality Control									

DQA: _____ Date: _____

DART AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

Work Order ID 113007

February-11-14 3:16:32 PM

113007

Item ID: D4003-049 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID:

Item Name: Tank Vent Line Assembly **Stop** *NS2*

Start Date: 2/10/14 **Start Qty:** 2.00 *2*

Required Date: 2/10/14 **Req'd Qty:** 2.00 *2*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	Identify as per dwg & Stock Location: ST243	0.00							
170						2X	DAS 28 ~~9-89~~	14-03-11	
Packaging	**Memo**	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180						MLJ 14-03-12			
QC	**Memo**	0.00							
Quality Control									

14-03-12

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other _____

Picklist Print

February-11-14 3:16:35 PM

Work Order ID: 113007 *113007*

Parent Item: D4003-049 *D4003-049*

Parent Item Name: Tank Vent Line Assembly

Start Date: 2/10/14 **Required Date:** 2/10/14

Start Qty: 2.00 **Required Qty:** 2.00

Comments: IPP rev A 10.01.05 new Issue Prelim EC verified by: DD IPP Rev B 10.05.13 ecn 10-562 EC verified by:DD IPP REV:C 13.04.17 NOW MADE IN HOUSE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN818-8D *AN818-8D* Nut		Purchased	No				Each	32.0000	**	2	FF	03 14-03-10	
				Location			**Loc Qty**		**Loc Code**				
				ST551			32						
					m114523		12						
					m127044		20			2			
M6061T6T0.500W.035 *M6061T6T0.500W.035* 6061-T6 RD Tube .500 x.035W		Purchased	No				f	101.0600	**	3	FF	14-03-10	
				Location			**Loc Qty**		**Loc Code**				
				MAT014			101.06						
					121848		44.06						
					M127417		57			2			
MS20819-8D *MS20819-8D* Sleeve		Purchased	No				Each	21.0000	**	2	FF	14-03-10	
				Location			**Loc Qty**		**Loc Code**				
				ST312			21						
					m126275		21			2			

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

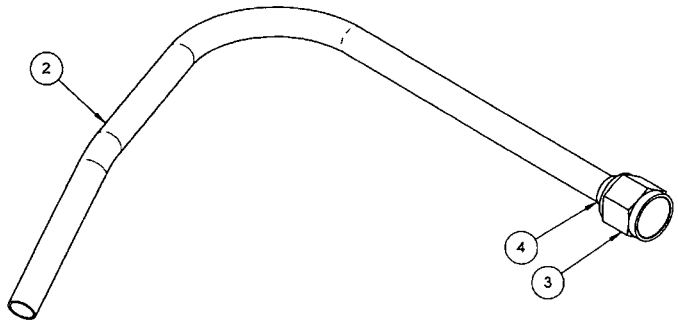
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

ITEM NO.	QTY. -049	PART NUMBER	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
1	X	D4003-049	TANK VENT LINE ASSEMBLY	JCA-M47-2-17
2	1	D4003-9	VENT LINE	
3	1	AN818-8D	NUT	
4	1	MS20819-8D	SLEEVE	

COPY
113007_MC
14-02-12



D4003-049 TANK VENT LINE ASSEMBLY

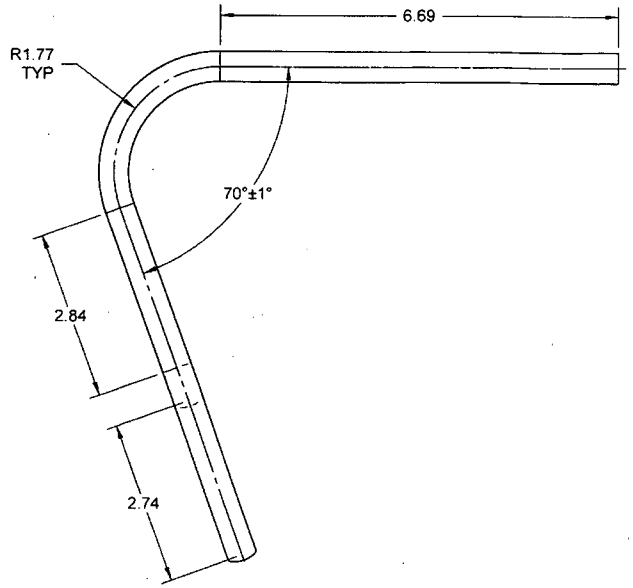
RELEASED
2010 -05- 05

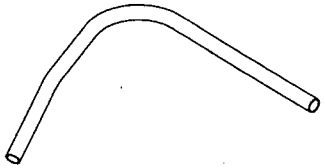
NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4003-049" AND B/N USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.11 lbs

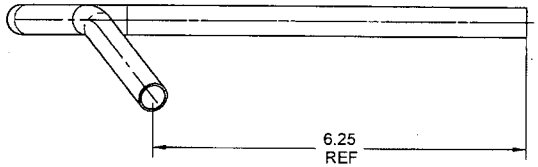
DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D4003 REV. A
MFG. APPR.		SHEET 2 OF 9
APPROVED		TITLE LINE SCALE NTS
DE APPR.		
DATE 10.02.05		

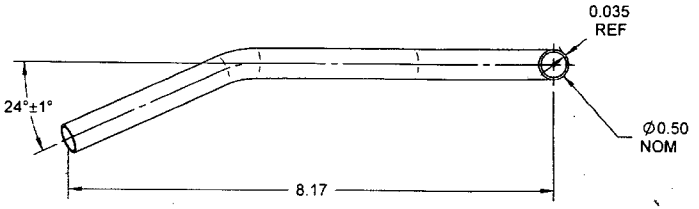
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DART AEROSPACE PART NUMBER	JOHN CAMERON AVIATION PART NUMBER
D4003-9	REF JCA-M47-2-17









D4003-9 VENT LINE

RELEASED
2010 -05- 05

NOTES:
1) MATERIAL: 6061-T6 OR 6061-T62 ALUMINUM TUBING, Ø0.500 X 0.035 WALL THICKNESS
PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A-225/8
REF DART SPEC M6061T60.500W.035
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.08 lbs

DESIGN	
DRAWN	
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	10.02.05

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.	REV. A
D4003	SHEET 7 OF 9
TITLE	SCALE
LINE	NTS

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DART AEROSPACE LTD

DART AEROSPACE

Description: Tank Vent Line Assembly		Work Order:	113007
Inspection Drawing: D4003	Rev: A	Part Number:	D4003-049

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
6.69	± 0.030	6.69	V		SFab-07	
2.84	± 0.030	2.84	V		" -07	
2.74	± 0.030	2.74	V		" -07	
8.17	± 0.030	8.17	V		" -07	
70°		± 1°			SFab-05	

Measured by:	Checked By:	QC inspector:	Engineering Approval (*if necessary*):
FS	DAS 30 9-89	DAS 27 9-89	
Date 14-03-10	Date 14/03/10	Date 14/3/11	Date